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EXAMINER

JAGANNATHAN, MELANIE

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HAO BI, JOHN D. REED, and JACK A. SMITH

Appeal 2009-007240
Application 10/685,372
Technology Center 2400

Before JOSEPH F. RUGGIERO, ROBERT E. NAPPI, and
ELENI MANTIS MERCADER, *Administrative Patent Judges*.

RUGGIERO, *Administrative Patent Judge*.

DECISION ON APPEAL¹

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Final Rejection of claims 1-3, 7-10, and 15. Claims 4-6, 11-14, and 16-20 have been indicated by the Examiner to contain allowable subject matter but are objected to as being dependent on a rejected claim. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Appeal Brief (filed January 9, 2006), the Answer (mailed February 23, 2006), and the Reply Brief (filed April 20, 2006) for the respective details.

Appellants' Invention

Appellants' invention relates to the extension or termination of a channel allocation to a wireless communication device after a determination that the wireless communication device has discontinued transmission on the allocated channel. (*See generally* Spec. 5:21-6:8).

Claim 1 is illustrative of the invention and reads as follows:

1. A method in a wireless communications network infrastructure entity, the method comprising:

determining that a wireless communications device has discontinued transmission on an allocated channel;

extending the channel allocation to the wireless communications device after determining that the wireless communications device discontinued transmission;

terminating the channel allocation if the channel allocation is not extended.

The Examiner's Rejection

The Examiner relies on the following prior art reference to show unpatentability:

Kuo	US 6,504,827 B1	Jan. 7, 2003
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Claims 1-3, 7-10, and 15, all of the appealed claims, stand rejected under 35 U.S.C. § 102(e) as being anticipated by Kuo.

ANALYSIS

Claims 1 and 7-9

Appellants' arguments with respect to independent claim 1 initially focus on the contention that, in contrast to the claimed invention, Kuo does not disclose the determination of whether a mobile terminal has discontinued transmission on an allocated channel. According to Appellants (App. Br. 3-4; Reply Br. 2-3), while Kuo discloses the transmission of flags between a base station and a mobile terminal, the flags merely indicate whether or not data should be sent at some future time over an assigned channel. In Appellants' view, Kuo discloses only a determination of *when* data should be sent to a mobile terminal, not a determination that a mobile terminal has discontinued transmission as claimed. In a related argument (App. Br. 4; Reply Br. 1-2), Appellants contend that, since the communication flags in Kuo are used only for scheduling future transmission on an allocated

channel, there is no disclosure of any extending or terminating of a previous channel allocation as claimed.

We do not find Appellants' arguments persuasive as we find ample support within the disclosure of Kuo to support the Examiner's stated position (Ans. 3-4). As further explained by the Examiner (Ans. 6), because of the discontinuous bursty nature of the communication between the base station BS and the mobile terminal MT in Kuo, communication flags are transmitted to enable communication between the base station and mobile terminal to resume (col. 5, ll. 8-58). The flag communication is more particularly illustrated in Kuo's Figures 7 and 8 flow charts along with the accompanying description beginning at col. 5, line 59 of Kuo.

As described, the base station in Kuo sends a positive flag ($RRF = 1$) to the mobile terminal indicating that the base station is ready to receive information over the assigned channel from the mobile terminal (Fig. 7, step 630). Upon receipt at the base station of a positive flag ($RTF = 1$) from the mobile terminal, communication will resume on the assigned channel (Fig. 7, steps 660 and 670). We agree with the Examiner (Ans. 7) that an ordinarily skilled artisan would have recognized and appreciated that the transmission and receipt of positive flags by Kuo's base station corresponds to the claimed extension of channel allocation enabling communication to resume between the base station and the mobile terminal.

We further find that the left branch of the Figure 8 flow chart of Kuo, which describes communication from the mobile terminal to the base station, illustrates the factual situation in which the mobile terminal indicates to the base station that it has no data to send by transmitting a negative flag ($RTF = 0$) to the base station (Fig. 8, step 720). We agree with the Examiner (Ans.

7-8) that an ordinarily skilled artisan would have recognized and appreciated that the receipt of the negative flag at the base station corresponds to the claimed determination that the mobile terminal has discontinued transmission. Similarly, we agree with the Examiner (Ans. 8) that Kuo's disclosure of the attendant shut down of the allocated channel after transmission of the negative flag corresponds to the claimed channel allocation termination (Fig. 8, step 760; col. 6, ll. 28-34).

We also find no error in the Examiner's determination (Ans. 10-12) that Kuo discloses that the determination of whether the mobile terminal has discontinued transmission includes the monitoring of the data control channel R-DCCH as set forth in dependent claim 7 (col. 6, ll. 10-28). We further find that the Examiner (Ans. 12-15) did not err in concluding that Kuo's use of available spectrum resources as well as the monitoring of RF conditions in determining when to send communication flags encompasses the "power estimation" factor, i.e., good RF conditions result in less power consumption, of claim 9. In other words, implicit in Kuo's disclosure of resuming transmission when RF conditions improve is that poor RF conditions were included in the conditions for the determination that transmission has been discontinued. Similarly, we find no error in the Examiner's determination (Ans. 15) that, because of the bursty nature of the communication between the base station and the mobile terminal, Kuo's disclosure of decoding information on the receiving data channel will determine whether transmission has been discontinued from the mobile terminal (col. 3, ll. 57-64)

In view of the above discussion, since Appellants have not demonstrated that the Examiner erred in finding that all of the claimed

limitations are present in the disclosure of Kuo, the Examiner's 35 U.S.C. § 102(e) rejection of independent claim 1 and dependent claims 7-9 is sustained.

Dependent claim 2

We also sustain the Examiner's anticipation rejection, based on Kuo, of dependent claim 2 which includes limitations directed to the use of transmission "rate control" information to extend the channel allocation. We find no error in the Examiner's determination that Kuo's use of single bit positive or negative flags, which enable resumption of communication between the base station and the mobile station, corresponds to the use of "rate control" information to extend a channel as claimed. As pointed out by the Examiner (Ans. 4, 5, 8, and 9), Kuo's use of a single bit flag to extend a channel allocation is remarkably similar to Appellants' disclosed use of a single bit with a positive or negative polarity attribute, which Appellants have designated as "rate control" information, to indicate the extension of a channel allocation. (Specification, 11:17-23). It is further our view that an ordinarily skilled artisan would have recognized and appreciated that the indication of the resumption of communication in Kuo, as indicated by the transmission of a positive flag bit, would correspond to the broadly claimed use of "rate control" information for an indication of channel allocation extension, i.e., the information rate has changed from zero to a positive value.

Further, although we found no error in the Examiner's determination that Kuo's use of single bit communication flags for channel allocation extension corresponds to the claimed use of "rate control" information for

channel extension, we note that the limitation calling for the specific content of the information, namely, that the information is “rate control” information, essentially constitutes non-functional descriptive material. As such, the fact that the information is given the name “rate control” information does not further limit the claimed invention either functionally or structurally. Such non-functional descriptive material does not patentably distinguish over prior art that otherwise renders the claims unpatentable.² It is particularly noteworthy that, while claim 2 includes a recitation of “rate control” information, there is no indication in the claim that the information rate is ever controlled, but, rather, only that this named information is used for channel allocation extension.

Dependent claim 3

We also sustain the Examiner’s anticipation rejection of dependent claim 3 for similar reasons as discussed with respect to dependent claim 2, i.e., Kuo’s use of single bit flags to extend or terminate channel allocation corresponds to the use of “rate control” information as claimed. It is further apparent that, after the allocated channel in Kuo is shut down as indicated by the transmission of a negative bit flag, the channel allocation is not extended as claimed by not transmitting a positive flag unless and until such transmission is needed to extend the channel allocation and resume communication. Also, Appellants’ argument (Reply Br. 3) that claim 3 requires that channel allocation is extended without using rate control

² See *In re Ngai*, 367 F.3d 1336, 1339 (Fed. Cir. 2004); see also *Ex Parte Nehls*, No. 2007-1823, 2008 WL 258370 (BPAI 2008) (precedential), at *6-10 (discussing cases pertaining to non-functional descriptive material).

information is misplaced since the actual claim language recites “not extending the channel allocation....”

Independent claims 10 and 15

The Examiner’s anticipation of independent claims 10 and 15 is sustained as well. Independent claims 10 and 15, which are directed to the extension of a channel allocation (claim 10) or the termination of a channel allocation (claim 15), include the transmission determination feature of independent claim 1, as well as the rate information feature of claims 2 and 3. Appellants’ arguments (App. Br. 8-9; Reply Br. 5-6) rely on those asserted against claims 1-3, which arguments we have found to be unpersuasive as discussed *supra*.

CONCLUSION

Based on the analysis above, we conclude that the Examiner did not err in rejecting claims 1-3, 7-10, and 15 for anticipation under 35 U.S.C. § 102(e).

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DECISION

The Examiner's decision rejecting claims 1-3, 7-10, and 15 under 35 U.S.C. § 102(e) is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(v) (2009).

AFFIRMED

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